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| 10/047,666 | 01/15/2002 | Michael E. Barrett | 006560.P025 | 5277 |

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| EXAMINER |
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RIMELL, SAMUEL G

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| ART UNIT | PAPER NUMBER |
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2164

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10/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/047,666

Applicant(s)

BARRETT ET AL.

Examiner

Sam Rimell

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 9-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 9-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



**SAM RIMELL
PRIMARY EXAMINER**

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5 and 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edlund et al. (U.S. Patent 6,546,388) in view of Doliov (U.S. Pre-Grant Publication 2006/0004594).

Claim 1: Col. 8, line 40-62 describe the performance of a search query. The query produces search results. The search results are weighted using a calculated relevancy score (col. 10, lines 60-63, describing steps 5-6). The score is based on popularity counts, which are derived from selecting specific URLs (col. 9, line 49), in other words, derived by clicking (col. 3, lines 8-9).

The popularity counts are an inflation factor. As described at col. 9, lines 45-50, the popularity count is only incremented for the newest version of a website (version 0), which means that the popularity count weighs the newest version more heavily than any previous versions. The relevancy score thus becomes an enhanced score based on popularity (an enhanced popularity score).

Col. 9, lines 35-40 describe one form of generated search report, although the results produced by clicking on a URL will also constitute a search report.

Edlund differs in that it does not weight the clicks based on timestamps associated with the clicks.

However, Doliov teaches the usage of a table (Table 3) analogous to the table in col. 9, lines 35-40 of Edlund, which associated numbers of clicks with specific IP addresses, similar to Edlund which associates numbers of clicks with URLs. In Doliov, a timestamp is provided to the IP address to indicate when a search was initiated, and the clicks/IP-address/hour are thus measured. This information is then used to determine the probability that the clicking activity is not credible or illegitimate (paragraph 0007).

It would therefore have been obvious to modify the table of Edlund (col. 9, lines 35-40) to include additional columns of tracked information for: (1) timestamp; (2) clicks per hour at the given URL in order to refine the calculated relevancy for any one or all URLs (col. 10, line 60 of Edlund) by making additional adjustments (col. 11, lines 5-7 of Edlund) to the calculated relevancy for the credibility of the data as taught by Doliov (paragraph 0007 of Doliov).

Claim 3: The ranking scheme disclosed Edlund et al. involves taking a search result (based on a submitted search request) and a relevancy score and weighting the search results based on the relevancy score. As described at col. 9, lines 45-50, the popularity count is derived by selecting URLs (i.e. clicking) to generate the relevancy scores and the popularity count is only incremented for the newest version (version 0) of a website. This means that the popularity count weights the newest version more heavily than any other version. The relevancy score thus becomes an enhanced score based on popularity (an enhanced popularity score). Clicking on URLs sends results to a user in the form of documents associated with the URL.

Edlund differs in that it does not weight the clicks based on timestamps associated with the clicks.

However, Doliov teaches the usage of a table (Table 3) analogous to the table in col. 9, lines 35-40 of Edlund, which associated numbers of clicks with specific IP addresses, similar to Edlund which associates numbers of clicks with URLs. In Doliov, a timestamp is provided to the IP address to indicate when a search was initiated, and the clicks/IP-address/hour are thus measured. This information is then used to determine the probability that the clicking activity is not credible or illegitimate (paragraph 0007).

It would therefore have been obvious to modify the table of Edlund (col. 9, lines 35-40) to include additional columns of tracked information for: (1) timestamp; (2) clicks per hour at the given URL in order to refine the calculated relevancy for any one or all URLs (col. 10, line 60 of Edlund) by making additional adjustments (col. 11, lines 5-7 of Edlund) to the calculated relevancy for the credibility of the data as taught by Doliov (paragraph 0007 of Doliov).

Claim 4: The popularity counts described at col. 9, lines 36-42 form a weighting value for each search result. This weighting value is an inflation score. The inflation score is adaptive in that it can constantly change (the popularity counts change as the website receives more hits).

Claim 5: The overall rank applied to the search results is a blend of three factors: (1) content relevance value (2) popularity; and (3) document recency.

Claim 9: Col. 10, lines 45-47 describe a search query producing search results. Each search result has an enhanced popularity score (calculated relevancy value-col. 10, lines 61-62) that is weighted by a time decay rate (popularity counts—correlating to number of hits over time, col. 9, lines 35-41). As described at col. 9, lines 45-50, the popularity counts only increment the most recent version of the website (version 0). If no additional website versions appear, this

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count will continually increase over time and exceed the counts for the previous versions. This process is used to rank search results presented to the user (FIG. 4, steps 0406-0407).

Edlund differs in that it does not weight the clicks based on timestamps associated with the clicks.

However, Doliov teaches the usage of a table (Table 3) analogous to the table in col. 9, lines 35-40 of Edlund, which associated numbers of clicks with specific IP addresses, similar to Edlund which associates numbers of clicks with URLs. In Doliov, a timestamp is provided to the IP address to indicate when a search was initiated, and the clicks/IP-address/hour are thus measured. This information is then used to determine the probability that the clicking activity is not credible or illegitimate (paragraph 0007).

It would therefore have been obvious to modify the table of Edlund (col. 9, lines 35-40) to include additional columns of tracked information for: (1) timestamp; (2) clicks per hour at the given URL in order to refine the calculated relevancy for any one or all URLs (col. 10, line 60 of Edlund) by making additional adjustments (col. 11, lines 5-7 of Edlund) to the calculated relevancy for the credibility of the data as taught by Doliov (paragraph 0007 of Doliov).

Claim 10: The time decay rate (popularity count) is incremented (i.e. modified) for each use.

Claim 11: The enhanced popularity score (calculated relevancy value-col. 10, lines 61-62) is influenced by use rates (popularity counts).

Claim 12: The values in the popularity count column of col. 9, lines 36-42 are static values for the older versions. For the newest version (version 0), the popularity count can be static or can change with hits to the newest version (col. 9, lines 43-52).

Claims 13-14: Incrementing the popularity count of the newest version is considered a dynamic reassessment.

Claim 15: The popularity counts (number of hits over time) are the time decay rates. As seen in the table of col. 9, lines 35-42, there are highest and lowest decay rates (highest and lowest popularity counts). The enhanced popularity scores are the calculated relevancy values based on the popularity counts (col. 10, lines 60-61). The use history is the complete table at col. 9, lines 35-42. The enhanced popularity scores can be calculated for each search query, which means that there can be two or more such scores. The popularity counts are the time decay rates and are incremented only for the newest version of a web site (col. 9, lines 45-50). If no additional websites appear, this count will increase over time and exceed the counts for previous versions.

Edlund differs in that it does not weight the clicks based on timestamps associated with the clicks.

However, Doliov teaches the usage of a table (Table 3) analogous to the table in col. 9, lines 35-40 of Edlund, which associated numbers of clicks with specific IP addresses, similar to Edlund which associates numbers of clicks with URLs. In Doliov, a timestamp is provided to the IP address to indicate when a search was initiated, and the clicks/IP-address/hour are thus measured. This information is then used to determine the probability that the clicking activity is not credible or illegitimate (paragraph 0007).

It would therefore have been obvious to modify the table of Edlund (col. 9, lines 35-40) to include additional columns of tracked information for: (1) timestamp; (2) clicks per hour at the given URL in order to refine the calculated relevancy for any one or all URLs (col. 10, line 60 of

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Edlund) by making additional adjustments (col. 11, lines 5-7 of Edlund) to the calculated relevancy for the credibility of the data as taught by Doliov (paragraph 0007 of Doliov).

Claim 16: The weighting factor is popularity count, which is a rate of use of certain URLs during the time period of measurement.

Claim 17: See remarks for claim 11.

Claim 18: Popularity counts correlate to website traffic.

Claim 19: The popularity counts are calculated by the computer system incrementing a counter. A calculation is readable as an estimate, lacking any further details on how the estimate is made or what kind of estimate is made.

Claim 20: Col. 8, lines 66-67 calls for the retrieval data from documents and the calculation of the documents age. The only manner in which such a calculation could be performed is if the document was time and date stamped and the calculation of document age determined from the time and date stamp. The age of the document is input to a relevancy calculator (col. 9, lines 1-2) which calculates a relevancy score (col. 10, lines 60-61). This score reads as the claimed enhanced "population" score. The enhanced "population" score also considers popularity counts that are only incremented on the newest version of a website (col. 9, lines 45-50). As a result, the popularity count used to form the enhanced "population" score weighs more heavily on the newest version of a website than on any previous version.

Edlund differs in that it does not weight the clicks based on timestamps associated with the clicks.

However, Doliov teaches the usage of a table (Table 3) analogous to the table in col. 9, lines 35-40 of Edlund, which associated numbers of clicks with specific IP addresses, similar to

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Edlund which associates numbers of clicks with URLs. In Doliov, a timestamp is provided to the IP address to indicate when a search was initiated, and the clicks/IP-address/hour are thus measured. This information is then used to determine the probability that the clicking activity is not credible or illegitimate (paragraph 0007).

It would therefore have been obvious to modify the table of Edlund (col. 9, lines 35-40) to include additional columns of tracked information for: (1) timestamp; (2) clicks per hour at the given URL in order to refine the calculated relevancy for any one or all URLs (col. 10, line 60 of Edlund) by making additional adjustments (col. 11, lines 5-7 of Edlund) to the calculated relevancy for the credibility of the data as taught by Doliov (paragraph 0007 of Doliov).

Claim 21: The age of the document is calculated (col. 8, lines 66-67).

Remarks

Applicant's arguments are addressed to the amendments set forth in claims 1, 3, 9, 15 and 20. The amended features are found to reside in the reference to Doliov, as discussed herein.

Since applicant's presented amendment was a bona fide attempt to advance prosecution in response to the suggestions provided in the interview of July 31, 2007, this current rejection has been made non-final.

Any inquiry concerning this communication should be directed to Sam Rimell at telephone number (571) 272-4084



Sam Rimell
Primary Examiner
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